

## Data Validation Checklist Semivolatile Organic Analyses

Project: 35<sup>TH</sup> Avenue Superfund Site  
 Laboratory: TestAmerica – Tampa, FL  
 Method: SW-846 8270C Low-Level (PAH)  
 Matrix: Soil  
 Reviewer: Jane Lindsey  
 Concurrence<sup>1</sup>: Carol Lovett, Martha Meyers-Lee

Project No: 15268508.20000  
 Job ID.: 680-87318-3  
 Associated Samples: Refer to **Attachment A** (Sample Summary)  
 Date(s) Collected: 02/07/2013 and 02/08/2013  
 Date: 02/27/2013  
 Date: 03/28/2013

Review Questions	Yes	No	N/A	Samples (Analytes) Affected/Comments	Flag
1. Were sample storage and preservation requirements met? If temperature >6°C, then J/UJ-flag results.	✓				
2. Were all COC records signed and integrity seals intact, indicating that COC was maintained for all samples?	✓				
3. Were there any problems noted in laboratory data package concerning condition of samples upon receipt?		✓			
4. Do any soil samples contain more than 50% water? If yes, then results are to be reported on a wet-weight basis.		✓			
5. Were holding times met (≤7 and 14 days from collection to extraction for aqueous and solid samples, respectively; ≤40 days from extraction to analysis)? If not, then J/UJ-flag sample results. If grossly (2x) exceeded, then flag J/R.	✓				
6. Were results for all project-specified target analytes reported?	✓				
7. Were project-specified Reporting Limits achieved for undiluted sample analyses?	✓				
8. Were samples with analyte concentrations exceeding the calibration range of the instrument re-analyzed at a higher dilution? If not, then J-flag sample result.			✓		
9. Was a method blank extracted with each batch (i.e., one per 20 samples, per batch, per matrix and per level)?	✓				
10. Were target analytes detected in the method blank?		✓			
11. Were target analytes detected in equipment/rinsate blanks?		✓		PAHs were not detected during the analysis of rinsate blank 020513-RB-Bowls+Spoons (680-87170-29).	

<sup>1</sup> Independent technical reviewer  
 URS Group, Inc.  
 Page 1 of 5

## Data Validation Checklist (Continued)

Review Questions	Yes	No	N/A	Samples (Analytes) Affected/Comments	Flag
12. Are equipment/rinsate blanks associated with every sample? If no, note in DV report.	✓			According to the QAPP, a rinsate blank is to be collected after each decontamination event, which occurs once per week per the client. A rinsate blank (020513-RB-Bowls+Spoons) was collected during the week of 02/04/2013. The rinsate blank was analyzed for PAHs under Test America Job ID 680-87170-2.	
13. Were analytes detected in samples below the blank contamination action level? If yes, U-flag positive sample results <5x associated blank concentration (10x for common blank contaminants – phthalates)			✓	Blank contamination does not exist.	
14. Is a field duplicate associated with this Job?	✓			<ul style="list-style-type: none"> <li>CV0005BB-CS (680-87318-40 [reported under Job ID 680-87318-2]) and CV0005BB-CSD (680-87318-41)</li> <li>CV0008B-CS (680-87318-45) and CV0008B-CSD (680-87318-44)</li> </ul>	
15. Was precision deemed acceptable as defined by the project plans?		✓		See <b>Attachment B</b> (Field Duplicate Evaluation)	J
16. Were DFTPP ion abundance criteria (i.e., Table 3 of SW-846 8270C) met? If no, professional judgment may be applied to determine to what extent the data may be utilized.	✓			Alternate tuning criteria were used by the laboratory (i.e., EPA Method 525.2). All ion abundance criteria were met per EPA Method 525.2.	
17. Were samples analyzed within 12 hours of the DFTPP tune? If no, professional judgment may be applied to determine to what extent the data may be utilized.	✓				
18. Were initial and continuing calibration standards analyzed at the proper frequency for each instrument? <ul style="list-style-type: none"> <li>Ensure that a minimum of five standards are used for the initial calibration. If no, use professional judgment to determine the effect on the data and note in the reviewer narrative.</li> <li>An initial calibration is to be associated with each sample analysis.</li> <li>A continuing calibration standard is to be analyzed for every 12 hours of sample analysis per instrument.</li> </ul>	✓			<ul style="list-style-type: none"> <li>Initial Calibration: 01/30/2013, instrument BSMA5973</li> <li>ICV: 01/30/2013 @13:35</li> <li>CCV: 02/19/2013 @10:52</li> <li>Initial Calibration: 01/07/2013, instrument BSMC5973</li> <li>ICV: 01/07/2013 @17:31</li> <li>CCV: 02/15/2013 @11:56</li> <li>CCV: 02/21/2013 @11:47</li> <li>Initial Calibration 01/07/2013, instrument BSMD5973</li> <li>ICV: 01/07/2013 @13:20</li> <li>CCV: 02/20/2013 @14:01</li> </ul>	

## Data Validation Checklist (Continued)

Review Questions	Yes	No	N/A	Samples (Analytes) Affected/Comments	Flag
19. Were calibration results within laboratory/project specifications? <ul style="list-style-type: none"> <li>ICAL (Criteria: <math>\leq 15</math> mean %RSD with individual CCC %RSD <math>\leq 30</math> (<math>\leq 50\%</math> for poor performers), OR <math>r \geq 0.995</math>, OR <math>r^2 \geq 0.99</math>, and RRF <math>\geq 0.050</math> (<math>\geq 0.010</math> for poor performers)):               <ul style="list-style-type: none"> <li>If %RSD <math>&gt; 15</math> (<math>&gt; 50\%</math> for poor performers), or <math>r &lt; 0.995</math>, or <math>r^2 &lt; 0.995</math>, then J-flag positive results and UJ-flag non-detects</li> <li>If mean RRF <math>&lt; 0.050</math> (<math>&lt; 0.010</math> for poor performers), then J-flag positive results and R-flag non-detects</li> </ul> </li> <li>ICV and CCV (Criteria: <math>\leq 20\%D</math> (<math>\leq 50\%</math> for poor performers) and RF <math>\geq 0.050</math> (<math>\geq 0.010</math> for poor performers)):               <ul style="list-style-type: none"> <li>If %D <math>&gt; 20</math> (<math>&gt; 50\%</math> for poor performers), then J-flag positive results and UJ-flag non-detects</li> <li>If RF <math>&lt; 0.050</math> (<math>&lt; 0.010</math> for poor performers), then UJ-flag non-detected semivolatile target compounds</li> </ul> </li> </ul>		✓		ICV of 01/30/13 @ 13:35, instrument BSMA5973: 2-Methylnaphthalene @ 23.7 %D (Lab: $\leq 35$ , Project: $\leq 20$ ). Positive bias is indicated by the CCV percent difference; therefore, J flag the detected 2-methyl naphthalene result in associated samples <sup>2</sup> .	J
20. Was a LCS prepared for each batch and matrix?	✓				
21. Were LCS recoveries within lab control limits? If no, J-flag positive results when %R > Upper Control Limit (UCL) and J/R-flag results when %R < Lower Control Limit (LCL).	✓				
22. Were LCS/LCSD RPD within lab specifications? If no, J-flag positive results and UJ-flag non-detects		✓		LCS only	
23. Was a MS/MSD pair extracted at the proper frequency (one per 20 samples per batch)?	✓				
24. Is the MS/MSD parent sample a project-specific sample?	✓			<ul style="list-style-type: none"> <li>Prep Batch 134530: 680-87318-41 (CV0005BB-CS), MS/MSD</li> <li>Prep Batch 134515: 680-87320-1 (Batch sample), MS/MSD</li> <li>Prep Batch 134719: 680-87496-28 (Batch sample), MS/MSD</li> </ul>	
25. Were MS/MSD recoveries within laboratory/project specifications? <i>Only QC results for project samples that are reported under this Job ID are evaluated.</i> <ul style="list-style-type: none"> <li>If the native sample concentration &gt; 4x spiking level, then an evaluation of interference is not possible.</li> <li>If either MS or MSD recovery meets control limits, qualification of data is not warranted.</li> </ul>		✓		CV0005BB-CS (680-87318-41): <ul style="list-style-type: none"> <li>Benzo(a)anthracene MSD @ 135%R (40-130). Qualification of data is not required, because the MS %R (40) was acceptable.</li> <li>Benzo(a)pyrene MS @ 38%R (49-130). Qualification of data is not required, because the MSD %R (121) was acceptable.</li> </ul>	J

<sup>2</sup> 680-87318-45 through 48, and 50

## Data Validation Checklist (Continued)

Review Questions	Yes	No	N/A	Samples (Analytes) Affected/Comments	Flag
<ul style="list-style-type: none"> <li>MS and MSD %R&lt;10: J and R Flag positive and ND results, respectively</li> <li>MS and MSD %R &gt;10 and &lt;LCL: J-Flag positive and UJ-flag non-detect results</li> <li>MS and MSD R% &gt;UCL (or 140): J-Flag positive results</li> </ul>				<ul style="list-style-type: none"> <li>Benzo(b)fluoranthene MS @ -0.5%R (37-130). Qualification of data is not required, because the MSD %R (114) was acceptable.</li> <li>Benzo(k)fluoranthene MSD @ 164%R (32-130). Qualification of data is not required, because the MS %R (103) was acceptable.</li> <li>Chrysene MS @ 36%R (41-130). Qualification of data is not required, because the MSD %R (130) was acceptable.</li> <li>Fluoranthene MS and MSD @ -25 and 237%R (40-130), respectively. Flag result with J.</li> <li>Phenanthrene MS and MSD @ 21 and 171%R (42-130), respectively. Flag result with J.</li> <li>Pyrene MS and MSD @ -8%R and 234%R (44-130), respectively. Flag result with J.</li> </ul>	
<p>26. Were laboratory criteria met for precision during the MS/MSD analysis? <i>Only QC results for project samples that are reported under this Job ID are evaluated.</i></p> <ul style="list-style-type: none"> <li>If the native sample concentration &gt; 4x spiking level, then an evaluation of interference is not possible.</li> <li>If %RPD &gt; UCL, J-flag positive result and UJ-flag non-detect result</li> </ul>		✓		<p>CV0005BB-CS (680-87318-41):</p> <ul style="list-style-type: none"> <li>Fluoranthene MS/MSD RPD @ 66% (<math>\leq 40</math>)</li> <li>Phenanthrene MS/MSD RPD @ 61% (<math>\leq 40</math>)</li> <li>Pyrene MS/MSD RPD @ 61% (<math>\leq 40</math>)</li> </ul> <p>J-Flag positive results for the above-mentioned compounds in CV0005BB-CS</p>	J
<p>27. Were surrogate recoveries within lab/project specifications?</p> <ul style="list-style-type: none"> <li>If %R &lt;10, then J-flag positive and R-flag non-detect associated sample results</li> <li>If %R &gt;UCL, then J-flag positive results</li> <li>%R <math>\geq 10\%</math>, but &lt;LCL, then J-flag positive results and UJ-flag non-detect results</li> <li>If 1 %R &gt;UCL and 1 %R <math>\geq 10\%</math>, but &lt;LCL, then J-flag positive results and UJ-flag non-detect results</li> </ul>	✓			.	
<p>28. Were internal standard (IS) results within lab/project specifications?</p> <ul style="list-style-type: none"> <li>If IS area counts are less than 50% of the midpoint calibration standard, then J-flag positive and UJ-flag non-detect associated sample results</li> <li>If IS area counts are greater than 100% of the midpoint calibration standard, then J-flag positive results</li> </ul>	✓				

**Data Validation Checklist (Continued)**

Review Questions	Yes	No	N/A	Samples (Analytes) Affected/Comments	Flag
<ul style="list-style-type: none"> <li>If extremely low area counts are reported or performance exhibits a major abrupt drop-off, then a severe loss of sensitivity is indicated, J-flag positive and R-flag non-detect results</li> <li>If retention time of sample's internal standard is not within 30 seconds of the associated calibration standard, R-flag associated data.</li> <li>The chromatographic profile for that sample must be examined to determine if any false positives or negatives exists. For shifts of large magnitude, the reviewer may consider partial or total rejection of the data for that sample fraction. Positive results need not be qualified as R, if mass spectral criteria are met.</li> </ul>					
29. Were lab comments included in report?	✓			Refer to <b>Attachment C</b> (Case Narrative)	
<b>Comments:</b> The data validation was conducted in accordance with the <i>Non-Industrial Use Property Sampling Event QAPP for the 35th Avenue Removal Site, Birmingham, Alabama, Revision 1</i> (OTIE, October 2012). The data review process was modeled after the <i>USEPA Contract Laboratory Program (CLP) National Functional Guidelines (NFG) for Organic Methods Data Review</i> (EPA, October 1999) and <i>USEPA CLP NFG for Low Concentration Organic Methods Data Review</i> (EPA, June 2001). Sample results have been qualified based on the results of the data review process ( <b>Attachment D</b> ). Criteria for acceptability of data were based upon available site information, analytical method requirements, guidance documents, and professional judgment.					

**DV Flag Definitions:**

- J The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample.
- R The sample results are unusable. The analyte may or may not be present in the sample.
- U The analyte was analyzed for, but was not detected above the associated level; blank contamination may exist.
- UJ The analyte was not detected above the limit, and the limit is approximate and may be inaccurate or imprecise.

**ATTACHMENT A**  
**SAMPLE SUMMARY**

## Sample Summary

Client: Oneida Total Integrated Enterprises LLC  
Project/Site: 35th Avenue Superfund Site

TestAmerica Job ID: 680-87318-3  
SDG: 68087318-3

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
680-87318-41	CV0005BB-CSD	Solid	02/07/13 15:38	02/09/13 10:33
680-87318-42	CV0005AC-GS	Solid	02/07/13 15:01	02/09/13 10:33
680-87318-43	CV0008A-CS	Solid	02/08/13 08:50	02/09/13 10:33
680-87318-44	CV0008B-CSD	Solid	02/08/13 09:02	02/09/13 10:33
680-87318-45	CV0008B-CS	Solid	02/08/13 09:00	02/09/13 10:33
680-87318-46	CV0008C-CS	Solid	02/08/13 09:00	02/09/13 10:33
680-87318-47	CV0008D-CS	Solid	02/08/13 09:08	02/09/13 10:33
680-87318-48	CV0008E-CS	Solid	02/08/13 09:17	02/09/13 10:33
680-87318-49	CV0008F-CS	Solid	02/08/13 09:18	02/09/13 10:33
680-87318-50	CV0008AB-GS	Solid	02/08/13 00:00	02/09/13 10:33

**ATTACHMENT B**  
**FIELD DUPLICATE EVALUATION**



## Evaluation of Field Duplicate Results

## Attachment B

Analyte	CV0005BB-CS (680-87318-40)	RL	CV0005BB-CSD (680-87318-41)	RL	Unit	Avg. RLx5	RPD	Absolute difference	2x Avg RL	Action
Acenaphthene		400	120	570	µg/kg	2425	NA	120	970	None, absolute difference ≤ 2x Avg RL
Acenaphthylene	210	160	260	230	µg/kg	975	NA	50	390	None, absolute difference ≤ 2x Avg RL
Anthracene	250	34	370	48	µg/kg	205	39	NA	NA	None, RPD ≤ 50%
Benzo(a)anthracene	740	32	1600	46	µg/kg	195	74	NA	NA	J/UJ-flag, RPD > 50 %
Benzo(a)pyrene	520	42	1600	60	µg/kg	255	102	NA	NA	J/UJ-flag, RPD > 50 %
Benzo(b)fluoranthene	810	49	2400	70	µg/kg	297.5	99	NA	NA	J/UJ-flag, RPD > 50 %
Benzo(g,h,i)perylene	380	81	1000	110	µg/kg	477.5	NA	620	191	J/UJ-flag, absolute difference > 2x Avg RL
Benzo(k)fluoranthene	360	32	830	46	µg/kg	195	79	NA	NA	J/UJ-flag, RPD > 50 %
Chrysene	600	36	1500	52	µg/kg	220	86	NA	NA	J/UJ-flag, RPD > 50 %
Dibenzo(a,h)anthracene	150	81	260	110	µg/kg	477.5	NA	110	191	None, absolute difference ≤ 2x Avg RL
Fluoranthene	1100	81	2800	110	µg/kg	477.5	87	NA	NA	J/UJ-flag, RPD > 50 %
Fluorene	52	81	120	110	µg/kg	477.5	NA	68	191	None, absolute difference ≤ 2x Avg RL
Indeno(1,2,3-cd)pyrene	340	81	880	110	µg/kg	477.5	NA	540	191	J/UJ-flag, absolute difference > 2x Avg RL
1-Methylnaphthalene	130	160	440	230	µg/kg	975	NA	310	390	None, absolute difference ≤ 2x Avg RL
2-Methylnaphthalene	150	160	480	230	µg/kg	975	NA	330	390	None, absolute difference ≤ 2x Avg RL
Naphthalene	130	160	400	230	µg/kg	975	NA	270	390	None, absolute difference ≤ 2x Avg RL
Phenanthrene	590	32	1400	46	µg/kg	195	81	NA	NA	J/UJ-flag, RPD > 50 %
Pyrene	750	81	2700	110	µg/kg	477.5	113	NA	NA	J/UJ-flag, RPD > 50 %

Analyte	CV0008B-CS (680-87318-45)	RL	CV0008B-CSD (680-87318-44)	RL	Unit	Avg. RLx5	RPD	Absolute difference	2x Avg RL	Action
Acenaphthylene	110	220	47	180	µg/kg	1000	NA	63	400	None, absolute difference ≤ 2x Avg RL
Anthracene	170	47	73	37	µg/kg	210	NA	97	84	J/UJ-flag, absolute difference > 2x Avg RL
Benzo(a)anthracene	650	45	250	35	µg/kg	200	89	NA	NA	J/UJ-flag, RPD > 50 %
Benzo(a)pyrene	390	58	240	46	µg/kg	260	NA	150	104	J/UJ-flag, absolute difference > 2x Avg RL
Benzo(b)fluoranthene	630	68	450	53	µg/kg	302.5	33	NA	NA	None, RPD ≤ 50%
Benzo(g,h,i)perylene	510	110	220	88	µg/kg	495	NA	290	198	J/UJ-flag, absolute difference > 2x Avg RL
Benzo(k)fluoranthene	230	45	140	35	µg/kg	200	NA	90	80	J/UJ-flag, absolute difference > 2x Avg RL
Chrysene	700	50	360	39	µg/kg	222.5	64	NA	NA	J/UJ-flag, RPD > 50 %
Dibenzo(a,h)anthracene	160	110	67	88	µg/kg	495	NA	93	198	None, absolute difference ≤ 2x Avg RL
Fluoranthene	890	110	500	88	µg/kg	495	56	NA	NA	J/UJ-flag, RPD > 50 %
Fluorene	51	110		88	µg/kg	495	NA	51	198	None, absolute difference ≤ 2x Avg RL
Indeno(1,2,3-cd)pyrene	440	110	190	88	µg/kg	495	NA	250	198	J/UJ-flag, absolute difference > 2x Avg RL
1-Methylnaphthalene	520	220	130	180	µg/kg	1000	NA	390	400	None, absolute difference ≤ 2x Avg RL
2-Methylnaphthalene	630	220	140	180	µg/kg	1000	NA	490	400	J/UJ-flag, absolute difference > 2x Avg RL
Naphthalene	510	220	120	180	µg/kg	1000	NA	390	400	None, absolute difference ≤ 2x Avg RL
Phenanthrene	790	45	320	35	µg/kg	200	85	NA	NA	J/UJ-flag, RPD > 50 %
Pyrene	850	110	410	88	µg/kg	495	NA	440	198	J/UJ-flag, absolute difference > 2x Avg RL

A blank cell indicates the analyte was not detected

µg/kg - micrograms per kilogram  
J - Estimated value  
NA - Not applicable  
RL - Reporting limit  
RPD - Relative percent difference  
UJ - Not detected and the limit is estimated

Precision is based on either the absolute difference between sample results or RPD. If the sample results are less than or equal to 5x's the RL, then precision is based on the absolute difference between duplicate results. If sample results >5x's RL, then precision is evaluated using RPD. J-Flag sample results whenever the absolute difference is greater than the RL (2x for soils) or the RPD >20% (50% for soil). Table above presents the results for detected analytes only.

**ATTACHMENT C**  
**CASE NARRATIVE**

## Case Narrative

Client: Oneida Total Integrated Enterprises LLC  
Project/Site: 35th Avenue Superfund Site

TestAmerica Job ID: 680-87318-3  
SDG: 68087318-3

**Job ID: 680-87318-3**

**Laboratory: TestAmerica Savannah**

### Narrative

## CASE NARRATIVE

**Client: Oneida Total Integrated Enterprises LLC**

**Project: 35th Avenue Superfund Site**

**Report Number: 680-87318-3**

With the exceptions noted as flags or footnotes, standard analytical protocols were followed in the analysis of the samples and no problems were encountered or anomalies observed. In addition all laboratory quality control samples were within established control limits, with any exceptions noted below. Each sample was analyzed to achieve the lowest possible reporting limit within the constraints of the method. In some cases, due to interference or analytes present at high concentrations, samples were diluted. For diluted samples, the reporting limits are adjusted relative to the dilution required.

Calculations are performed before rounding to avoid round-off errors in calculated results.

All holding times were met and proper preservation noted for the methods performed on these samples, unless otherwise detailed in the individual sections below.

### RECEIPT

The samples were received on 02/09/2013; the samples arrived in good condition, properly preserved and on ice. The temperatures of the 2 coolers at receipt time were 2.2° C and 2.8° C.

### SEMIVOLATILE ORGANIC COMPOUNDS BY GCMS - LOW LEVEL

Samples CV0005BB-CSD (680-87318-41), CV0005AC-GS (680-87318-42), CV0008A-CS (680-87318-43), CV0008B-CSD (680-87318-44), CV0008B-CS (680-87318-45), CV0008C-CS (680-87318-46), CV0008D-CS (680-87318-47), CV0008E-CS (680-87318-48), CV0008F-CS (680-87318-49) and CV0008AB-GS (680-87318-50) were analyzed for Semivolatile Organic Compounds by GCMS - Low Level in accordance with EPA SW-846 Method 8270C. The samples were prepared on 02/14/2013, 02/15/2013 and 02/20/2013 and analyzed on 02/15/2013, 02/19/2013, 02/20/2013 and 02/21/2013.

Samples CV0005BB-CSD (680-87318-41)[4X], CV0005AC-GS (680-87318-42)[4X], CV0008A-CS (680-87318-43)[4X], CV0008B-CSD (680-87318-44)[4X], CV0008B-CS (680-87318-45)[4X], CV0008C-CS (680-87318-46)[4X], CV0008D-CS (680-87318-47)[4X], CV0008E-CS (680-87318-48)[4X] and CV0008F-CS (680-87318-49)[4X] required dilution prior to analysis. The reporting limits have been adjusted accordingly.

Several analytes recovered outside the recovery criteria for the MS/MSD of sample CV0005BB-CSDMS (680-87318-41) in batch 660-134530. Fluoranthene, Phenanthrene and Pyrene exceeded the rpd limit.

Several analytes recovered outside the recovery criteria for the MS/MSD of sample 680-87496-28 in batch 660-134719.

No other difficulties were encountered during the Semivolatile Organic Compounds by GCMS - Low Level analyses.

All other quality control parameters were within the acceptance limits.

**ATTACHMENT D**  
**QUALIFIED SAMPLE RESULTS**

# Client Sample Results

Client: Oneida Total Integrated Enterprises LLC  
Project/Site: 35th Avenue Superfund Site

TestAmerica Job ID: 680-87318-3  
SDG: 68087318-3

Client Sample ID: CV0005BB-CSD

Lab Sample ID: 680-87318-41

Date Collected: 02/07/13 15:38

Matrix: Solid

Date Received: 02/09/13 10:33

Percent Solids: 68.9

Method: 8270C LL - Semivolatile Organic Compounds by GCMS - Low Levels									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	120	J	570	110	ug/Kg	☆	02/14/13 14:34	02/15/13 20:58	4
Acenaphthylene	260		230	29	ug/Kg	☆	02/14/13 14:34	02/15/13 20:58	4
Anthracene	370		48	24	ug/Kg	☆	02/14/13 14:34	02/15/13 20:58	4
Benzo[a]anthracene	1600	F J	46	22	ug/Kg	☆	02/14/13 14:34	02/15/13 20:58	4
Benzo[a]pyrene	1600	F J	60	30	ug/Kg	☆	02/14/13 14:34	02/15/13 20:58	4
Benzo[b]fluoranthene	2400	F J	70	35	ug/Kg	☆	02/14/13 14:34	02/15/13 20:58	4
Benzo[g,h,i]perylene	1000	J	110	25	ug/Kg	☆	02/14/13 14:34	02/15/13 20:58	4
Benzo[k]fluoranthene	830	F J	46	21	ug/Kg	☆	02/14/13 14:34	02/15/13 20:58	4
Chrysene	1500	F J	52	26	ug/Kg	☆	02/14/13 14:34	02/15/13 20:58	4
Dibenz(a,h)anthracene	260		110	23	ug/Kg	☆	02/14/13 14:34	02/15/13 20:58	4
Fluoranthene	2800	F J	110	23	ug/Kg	☆	02/14/13 14:34	02/15/13 20:58	4
Fluorene	120		110	23	ug/Kg	☆	02/14/13 14:34	02/15/13 20:58	4
Indeno[1,2,3-cd]pyrene	880	J	110	41	ug/Kg	☆	02/14/13 14:34	02/15/13 20:58	4
1-Methylnaphthalene	440		230	25	ug/Kg	☆	02/14/13 14:34	02/15/13 20:58	4
2-Methylnaphthalene	480		230	41	ug/Kg	☆	02/14/13 14:34	02/15/13 20:58	4
Naphthalene	400		230	25	ug/Kg	☆	02/14/13 14:34	02/15/13 20:58	4
Phenanthrene	1400	F J	46	22	ug/Kg	☆	02/14/13 14:34	02/15/13 20:58	4
Pyrene	2700	F J	110	21	ug/Kg	☆	02/14/13 14:34	02/15/13 20:58	4
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
o-Terphenyl	109		30 - 130				02/14/13 14:34	02/15/13 20:58	4

Client Sample ID: CV0005AC-GS

Lab Sample ID: 680-87318-42

Date Collected: 02/07/13 15:01

Matrix: Solid

Date Received: 02/09/13 10:33

Percent Solids: 91.3

Method: 8270C LL - Semivolatile Organic Compounds by GCMS - Low Levels									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	710		420	85	ug/Kg	☆	02/14/13 14:34	02/15/13 21:53	4
Acenaphthylene	130	J	170	21	ug/Kg	☆	02/14/13 14:34	02/15/13 21:53	4
Anthracene	1100		36	18	ug/Kg	☆	02/14/13 14:34	02/15/13 21:53	4
Benzo[a]anthracene	2700		34	17	ug/Kg	☆	02/14/13 14:34	02/15/13 21:53	4
Benzo[a]pyrene	2500		44	22	ug/Kg	☆	02/14/13 14:34	02/15/13 21:53	4
Benzo[b]fluoranthene	4100		52	26	ug/Kg	☆	02/14/13 14:34	02/15/13 21:53	4
Benzo[g,h,i]perylene	1600		85	19	ug/Kg	☆	02/14/13 14:34	02/15/13 21:53	4
Benzo[k]fluoranthene	1500		34	15	ug/Kg	☆	02/14/13 14:34	02/15/13 21:53	4
Chrysene	2800		38	19	ug/Kg	☆	02/14/13 14:34	02/15/13 21:53	4
Dibenz(a,h)anthracene	480		85	17	ug/Kg	☆	02/14/13 14:34	02/15/13 21:53	4
Fluoranthene	7100		85	17	ug/Kg	☆	02/14/13 14:34	02/15/13 21:53	4
Fluorene	570		85	17	ug/Kg	☆	02/14/13 14:34	02/15/13 21:53	4
Indeno[1,2,3-cd]pyrene	1500		85	30	ug/Kg	☆	02/14/13 14:34	02/15/13 21:53	4
1-Methylnaphthalene	470		170	19	ug/Kg	☆	02/14/13 14:34	02/15/13 21:53	4
2-Methylnaphthalene	480		170	30	ug/Kg	☆	02/14/13 14:34	02/15/13 21:53	4
Naphthalene	510		170	19	ug/Kg	☆	02/14/13 14:34	02/15/13 21:53	4
Phenanthrene	5300		34	17	ug/Kg	☆	02/14/13 14:34	02/15/13 21:53	4
Pyrene	5700		85	16	ug/Kg	☆	02/14/13 14:34	02/15/13 21:53	4
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
o-Terphenyl	109		30 - 130				02/14/13 14:34	02/15/13 21:53	4

TestAmerica Savannah

Sample results have been qualified by URS in accordance with the Non-Industrial Use Property Sampling Event QAPP for the 35th Avenue Removal Site, Birmingham, Alabama, Revision 1 (OTIE, October 2012)

# Client Sample Results

Client: Oneida Total Integrated Enterprises LLC  
Project/Site: 35th Avenue Superfund Site

TestAmerica Job ID: 680-87318-3  
SDG: 68087318-3

Client Sample ID: CV0008A-CS

Lab Sample ID: 680-87318-43

Date Collected: 02/08/13 08:50

Matrix: Solid

Date Received: 02/09/13 10:33

Percent Solids: 98.4

Method: 8270C LL - Semivolatile Organic Compounds by GCMS - Low Levels									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	400	U	400	81	ug/Kg	☆	02/15/13 10:18	02/20/13 16:40	4
Acenaphthylene	30	J	160	20	ug/Kg	☆	02/15/13 10:18	02/20/13 16:40	4
Anthracene	44		34	17	ug/Kg	☆	02/15/13 10:18	02/20/13 16:40	4
Benzo[a]anthracene	170		32	16	ug/Kg	☆	02/15/13 10:18	02/20/13 16:40	4
Benzo[a]pyrene	160		42	21	ug/Kg	☆	02/15/13 10:18	02/20/13 16:40	4
Benzo[b]fluoranthene	300		49	25	ug/Kg	☆	02/15/13 10:18	02/20/13 16:40	4
Benzo[g,h,i]perylene	150		81	18	ug/Kg	☆	02/15/13 10:18	02/20/13 16:40	4
Benzo[k]fluoranthene	88		32	15	ug/Kg	☆	02/15/13 10:18	02/20/13 16:40	4
Chrysene	240		36	18	ug/Kg	☆	02/15/13 10:18	02/20/13 16:40	4
Dibenz(a,h)anthracene	42	J	81	17	ug/Kg	☆	02/15/13 10:18	02/20/13 16:40	4
Fluoranthene	330		81	16	ug/Kg	☆	02/15/13 10:18	02/20/13 16:40	4
Fluorene	81	U	81	17	ug/Kg	☆	02/15/13 10:18	02/20/13 16:40	4
Indeno[1,2,3-cd]pyrene	120		81	29	ug/Kg	☆	02/15/13 10:18	02/20/13 16:40	4
1-Methylnaphthalene	140	J	160	18	ug/Kg	☆	02/15/13 10:18	02/20/13 16:40	4
2-Methylnaphthalene	150	J	160	29	ug/Kg	☆	02/15/13 10:18	02/20/13 16:40	4
Naphthalene	100	J	160	18	ug/Kg	☆	02/15/13 10:18	02/20/13 16:40	4
Phenanthrene	220		32	16	ug/Kg	☆	02/15/13 10:18	02/20/13 16:40	4
Pyrene	270		81	15	ug/Kg	☆	02/15/13 10:18	02/20/13 16:40	4
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
o-Terphenyl	36		30 - 130				02/15/13 10:18	02/20/13 16:40	4

Client Sample ID: CV0008B-CSD

Lab Sample ID: 680-87318-44

Date Collected: 02/08/13 09:02

Matrix: Solid

Date Received: 02/09/13 10:33

Percent Solids: 91.4

Method: 8270C LL - Semivolatile Organic Compounds by GCMS - Low Levels									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	440	U	440	88	ug/Kg	☆	02/15/13 10:18	02/20/13 17:03	4
Acenaphthylene	47	J	180	22	ug/Kg	☆	02/15/13 10:18	02/20/13 17:03	4
Anthracene	73	J	37	18	ug/Kg	☆	02/15/13 10:18	02/20/13 17:03	4
Benzo[a]anthracene	250	J	35	17	ug/Kg	☆	02/15/13 10:18	02/20/13 17:03	4
Benzo[a]pyrene	240	J	46	23	ug/Kg	☆	02/15/13 10:18	02/20/13 17:03	4
Benzo[b]fluoranthene	450		53	27	ug/Kg	☆	02/15/13 10:18	02/20/13 17:03	4
Benzo[g,h,i]perylene	220	J	88	19	ug/Kg	☆	02/15/13 10:18	02/20/13 17:03	4
Benzo[k]fluoranthene	140	J	35	16	ug/Kg	☆	02/15/13 10:18	02/20/13 17:03	4
Chrysene	360	J	39	20	ug/Kg	☆	02/15/13 10:18	02/20/13 17:03	4
Dibenz(a,h)anthracene	67	J	88	18	ug/Kg	☆	02/15/13 10:18	02/20/13 17:03	4
Fluoranthene	500	J	88	18	ug/Kg	☆	02/15/13 10:18	02/20/13 17:03	4
Fluorene	88	U	88	18	ug/Kg	☆	02/15/13 10:18	02/20/13 17:03	4
Indeno[1,2,3-cd]pyrene	190	J	88	31	ug/Kg	☆	02/15/13 10:18	02/20/13 17:03	4
1-Methylnaphthalene	130	J	180	19	ug/Kg	☆	02/15/13 10:18	02/20/13 17:03	4
2-Methylnaphthalene	140	J	180	31	ug/Kg	☆	02/15/13 10:18	02/20/13 17:03	4
Naphthalene	120	J	180	19	ug/Kg	☆	02/15/13 10:18	02/20/13 17:03	4
Phenanthrene	320	J	35	17	ug/Kg	☆	02/15/13 10:18	02/20/13 17:03	4
Pyrene	410	J	88	16	ug/Kg	☆	02/15/13 10:18	02/20/13 17:03	4
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
o-Terphenyl	59		30 - 130				02/15/13 10:18	02/20/13 17:03	4

TestAmerica Savannah

Sample results have been qualified by URS in accordance with the Non-Industrial Use Property Sampling Event QAPP for the 35th Avenue Removal Site, Birmingham, Alabama, Revision 1 (OTIE, October 2012)

# Client Sample Results

Client: Oneida Total Integrated Enterprises LLC  
Project/Site: 35th Avenue Superfund Site

TestAmerica Job ID: 680-87318-3  
SDG: 68087318-3

Client Sample ID: CV0008B-CS

Lab Sample ID: 680-87318-45

Date Collected: 02/08/13 09:00

Matrix: Solid

Date Received: 02/09/13 10:33

Percent Solids: 70.5

Method: 8270C LL - Semivolatile Organic Compounds by GCMS - Low Levels									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	560	U	560	110	ug/Kg	☆	02/15/13 10:18	02/19/13 13:56	4
Acenaphthylene	110	J	220	28	ug/Kg	☆	02/15/13 10:18	02/19/13 13:56	4
Anthracene	170	J	47	24	ug/Kg	☆	02/15/13 10:18	02/19/13 13:56	4
Benzo[a]anthracene	650	J	45	22	ug/Kg	☆	02/15/13 10:18	02/19/13 13:56	4
Benzo[a]pyrene	390	J	58	29	ug/Kg	☆	02/15/13 10:18	02/19/13 13:56	4
Benzo[b]fluoranthene	630	J	68	34	ug/Kg	☆	02/15/13 10:18	02/19/13 13:56	4
Benzo[g,h,i]perylene	510	J	110	25	ug/Kg	☆	02/15/13 10:18	02/19/13 13:56	4
Benzo[k]fluoranthene	230	J	45	20	ug/Kg	☆	02/15/13 10:18	02/19/13 13:56	4
Chrysene	700	J	50	25	ug/Kg	☆	02/15/13 10:18	02/19/13 13:56	4
Dibenz(a,h)anthracene	160	J	110	23	ug/Kg	☆	02/15/13 10:18	02/19/13 13:56	4
Fluoranthene	890	J	110	22	ug/Kg	☆	02/15/13 10:18	02/19/13 13:56	4
Fluorene	51	J	110	23	ug/Kg	☆	02/15/13 10:18	02/19/13 13:56	4
Indeno[1,2,3-cd]pyrene	440	J	110	40	ug/Kg	☆	02/15/13 10:18	02/19/13 13:56	4
1-Methylnaphthalene	520	J	220	25	ug/Kg	☆	02/15/13 10:18	02/19/13 13:56	4
2-Methylnaphthalene	630	J	220	40	ug/Kg	☆	02/15/13 10:18	02/19/13 13:56	4
Naphthalene	510	J	220	25	ug/Kg	☆	02/15/13 10:18	02/19/13 13:56	4
Phenanthrene	790	J	45	22	ug/Kg	☆	02/15/13 10:18	02/19/13 13:56	4
Pyrene	850	J	110	21	ug/Kg	☆	02/15/13 10:18	02/19/13 13:56	4
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
o-Terphenyl	73		30 - 130				02/15/13 10:18	02/19/13 13:56	4

Client Sample ID: CV0008C-CS

Lab Sample ID: 680-87318-46

Date Collected: 02/08/13 09:00

Matrix: Solid

Date Received: 02/09/13 10:33

Percent Solids: 93.0

Method: 8270C LL - Semivolatile Organic Compounds by GCMS - Low Levels									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	430	U	430	86	ug/Kg	☆	02/15/13 10:18	02/19/13 14:11	4
Acenaphthylene	140	J	170	21	ug/Kg	☆	02/15/13 10:18	02/19/13 14:11	4
Anthracene	210	J	36	18	ug/Kg	☆	02/15/13 10:18	02/19/13 14:11	4
Benzo[a]anthracene	680	J	34	17	ug/Kg	☆	02/15/13 10:18	02/19/13 14:11	4
Benzo[a]pyrene	450	J	45	22	ug/Kg	☆	02/15/13 10:18	02/19/13 14:11	4
Benzo[b]fluoranthene	800	J	52	26	ug/Kg	☆	02/15/13 10:18	02/19/13 14:11	4
Benzo[g,h,i]perylene	550	J	86	19	ug/Kg	☆	02/15/13 10:18	02/19/13 14:11	4
Benzo[k]fluoranthene	270	J	34	15	ug/Kg	☆	02/15/13 10:18	02/19/13 14:11	4
Chrysene	720	J	39	19	ug/Kg	☆	02/15/13 10:18	02/19/13 14:11	4
Dibenz(a,h)anthracene	180	J	86	18	ug/Kg	☆	02/15/13 10:18	02/19/13 14:11	4
Fluoranthene	700	J	86	17	ug/Kg	☆	02/15/13 10:18	02/19/13 14:11	4
Fluorene	31	J	86	18	ug/Kg	☆	02/15/13 10:18	02/19/13 14:11	4
Indeno[1,2,3-cd]pyrene	440	J	86	30	ug/Kg	☆	02/15/13 10:18	02/19/13 14:11	4
1-Methylnaphthalene	220	J	170	19	ug/Kg	☆	02/15/13 10:18	02/19/13 14:11	4
2-Methylnaphthalene	210	J	170	30	ug/Kg	☆	02/15/13 10:18	02/19/13 14:11	4
Naphthalene	200	J	170	19	ug/Kg	☆	02/15/13 10:18	02/19/13 14:11	4
Phenanthrene	590	J	34	17	ug/Kg	☆	02/15/13 10:18	02/19/13 14:11	4
Pyrene	700	J	86	16	ug/Kg	☆	02/15/13 10:18	02/19/13 14:11	4
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
o-Terphenyl	80		30 - 130				02/15/13 10:18	02/19/13 14:11	4

TestAmerica Savannah

Sample results have been qualified by URS in accordance with the Non-Industrial Use Property Sampling Event QAPP for the 35th Avenue Removal Site, Birmingham, Alabama, Revision 1 (OTIE, October 2012)

## Client Sample Results

Client: Oneida Total Integrated Enterprises LLC  
Project/Site: 35th Avenue Superfund Site

TestAmerica Job ID: 680-87318-3  
SDG: 68087318-3

**Client Sample ID: CV0008D-CS**

**Lab Sample ID: 680-87318-47**

Date Collected: 02/08/13 09:08

Matrix: Solid

Date Received: 02/09/13 10:33

Percent Solids: 88.9

Method: 8270C LL - Semivolatile Organic Compounds by GCMS - Low Levels									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	450	U	450	89	ug/Kg	☆	02/20/13 13:23	02/21/13 13:01	4
Acenaphthylene	62	J	180	22	ug/Kg	☆	02/20/13 13:23	02/21/13 13:01	4
Anthracene	72		37	19	ug/Kg	☆	02/20/13 13:23	02/21/13 13:01	4
Benzo[a]anthracene	390		36	17	ug/Kg	☆	02/20/13 13:23	02/21/13 13:01	4
Benzo[a]pyrene	420		46	23	ug/Kg	☆	02/20/13 13:23	02/21/13 13:01	4
Benzo[b]fluoranthene	650		54	27	ug/Kg	☆	02/20/13 13:23	02/21/13 13:01	4
Benzo[g,h,i]perylene	350		89	20	ug/Kg	☆	02/20/13 13:23	02/21/13 13:01	4
Benzo[k]fluoranthene	290		36	16	ug/Kg	☆	02/20/13 13:23	02/21/13 13:01	4
Chrysene	460		40	20	ug/Kg	☆	02/20/13 13:23	02/21/13 13:01	4
Dibenz(a,h)anthracene	100		89	18	ug/Kg	☆	02/20/13 13:23	02/21/13 13:01	4
Fluoranthene	730		89	18	ug/Kg	☆	02/20/13 13:23	02/21/13 13:01	4
Fluorene	25	J	89	18	ug/Kg	☆	02/20/13 13:23	02/21/13 13:01	4
Indeno[1,2,3-cd]pyrene	270		89	32	ug/Kg	☆	02/20/13 13:23	02/21/13 13:01	4
1-Methylnaphthalene	96	J	180	20	ug/Kg	☆	02/20/13 13:23	02/21/13 13:01	4
2-Methylnaphthalene	97	J	180	32	ug/Kg	☆	02/20/13 13:23	02/21/13 13:01	4
Naphthalene	89	J	180	20	ug/Kg	☆	02/20/13 13:23	02/21/13 13:01	4
Phenanthrene	320		36	17	ug/Kg	☆	02/20/13 13:23	02/21/13 13:01	4
Pyrene	640		89	16	ug/Kg	☆	02/20/13 13:23	02/21/13 13:01	4
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
o-Terphenyl	101		30 - 130				02/20/13 13:23	02/21/13 13:01	4

**Client Sample ID: CV0008E-CS**

**Lab Sample ID: 680-87318-48**

Date Collected: 02/08/13 09:17

Matrix: Solid

Date Received: 02/09/13 10:33

Percent Solids: 96.5

Method: 8270C LL - Semivolatile Organic Compounds by GCMS - Low Levels									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	410	U	410	83	ug/Kg	☆	02/15/13 10:18	02/19/13 14:42	4
Acenaphthylene	94	J	170	21	ug/Kg	☆	02/15/13 10:18	02/19/13 14:42	4
Anthracene	160		35	17	ug/Kg	☆	02/15/13 10:18	02/19/13 14:42	4
Benzo[a]anthracene	520		33	16	ug/Kg	☆	02/15/13 10:18	02/19/13 14:42	4
Benzo[a]pyrene	300		43	22	ug/Kg	☆	02/15/13 10:18	02/19/13 14:42	4
Benzo[b]fluoranthene	510		51	25	ug/Kg	☆	02/15/13 10:18	02/19/13 14:42	4
Benzo[g,h,i]perylene	350		83	18	ug/Kg	☆	02/15/13 10:18	02/19/13 14:42	4
Benzo[k]fluoranthene	160		33	15	ug/Kg	☆	02/15/13 10:18	02/19/13 14:42	4
Chrysene	490		37	19	ug/Kg	☆	02/15/13 10:18	02/19/13 14:42	4
Dibenz(a,h)anthracene	110		83	17	ug/Kg	☆	02/15/13 10:18	02/19/13 14:42	4
Fluoranthene	780		83	17	ug/Kg	☆	02/15/13 10:18	02/19/13 14:42	4
Fluorene	26	J	83	17	ug/Kg	☆	02/15/13 10:18	02/19/13 14:42	4
Indeno[1,2,3-cd]pyrene	260		83	29	ug/Kg	☆	02/15/13 10:18	02/19/13 14:42	4
1-Methylnaphthalene	160	J	170	18	ug/Kg	☆	02/15/13 10:18	02/19/13 14:42	4
2-Methylnaphthalene	160	J	170	29	ug/Kg	☆	02/15/13 10:18	02/19/13 14:42	4
Naphthalene	140	J	170	18	ug/Kg	☆	02/15/13 10:18	02/19/13 14:42	4
Phenanthrene	560		33	16	ug/Kg	☆	02/15/13 10:18	02/19/13 14:42	4
Pyrene	680		83	15	ug/Kg	☆	02/15/13 10:18	02/19/13 14:42	4
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
o-Terphenyl	67		30 - 130				02/15/13 10:18	02/19/13 14:42	4

TestAmerica Savannah

Sample results have been qualified by URS in accordance with the Non-Industrial Use Property Sampling Event QAPP for the 35th Avenue Removal Site, Birmingham, Alabama, Revision 1 (OTIE, October 2012)



# Client Sample Results

Client: Oneida Total Integrated Enterprises LLC  
Project/Site: 35th Avenue Superfund Site

TestAmerica Job ID: 680-87318-3  
SDG: 68087318-3

Client Sample ID: CV0008F-CS

Lab Sample ID: 680-87318-49

Date Collected: 02/08/13 09:18

Matrix: Solid

Date Received: 02/09/13 10:33

Percent Solids: 91.3

## Method: 8270C LL - Semivolatile Organic Compounds by GCMS - Low Levels

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	440	U	440	88	ug/Kg	☆	02/15/13 10:18	02/20/13 17:25	4
Acenaphthylene	50	J	180	22	ug/Kg	☆	02/15/13 10:18	02/20/13 17:25	4
Anthracene	86		37	19	ug/Kg	☆	02/15/13 10:18	02/20/13 17:25	4
Benzo[a]anthracene	270		35	17	ug/Kg	☆	02/15/13 10:18	02/20/13 17:25	4
Benzo[a]pyrene	270		46	23	ug/Kg	☆	02/15/13 10:18	02/20/13 17:25	4
Benzo[b]fluoranthene	480		54	27	ug/Kg	☆	02/15/13 10:18	02/20/13 17:25	4
Benzo[g,h,i]perylene	220		88	19	ug/Kg	☆	02/15/13 10:18	02/20/13 17:25	4
Benzo[k]fluoranthene	130		35	16	ug/Kg	☆	02/15/13 10:18	02/20/13 17:25	4
Chrysene	370		40	20	ug/Kg	☆	02/15/13 10:18	02/20/13 17:25	4
Dibenz(a,h)anthracene	65	J	88	18	ug/Kg	☆	02/15/13 10:18	02/20/13 17:25	4
Fluoranthene	590		88	18	ug/Kg	☆	02/15/13 10:18	02/20/13 17:25	4
Fluorene	88	U	88	18	ug/Kg	☆	02/15/13 10:18	02/20/13 17:25	4
Indeno[1,2,3-cd]pyrene	190		88	31	ug/Kg	☆	02/15/13 10:18	02/20/13 17:25	4
1-Methylnaphthalene	120	J	180	19	ug/Kg	☆	02/15/13 10:18	02/20/13 17:25	4
2-Methylnaphthalene	110	J	180	31	ug/Kg	☆	02/15/13 10:18	02/20/13 17:25	4
Naphthalene	100	J	180	19	ug/Kg	☆	02/15/13 10:18	02/20/13 17:25	4
Phenanthrene	390		35	17	ug/Kg	☆	02/15/13 10:18	02/20/13 17:25	4
Pyrene	500		88	16	ug/Kg	☆	02/15/13 10:18	02/20/13 17:25	4
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
o-Terphenyl	58		30 - 130				02/15/13 10:18	02/20/13 17:25	4

Client Sample ID: CV0008AB-GS

Lab Sample ID: 680-87318-50

Date Collected: 02/08/13 00:00

Matrix: Solid

Date Received: 02/09/13 10:33

Percent Solids: 69.7

## Method: 8270C LL - Semivolatile Organic Compounds by GCMS - Low Levels

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	53	J	140	28	ug/Kg	☆	02/15/13 10:18	02/19/13 15:12	1
Acenaphthylene	63		57	7.1	ug/Kg	☆	02/15/13 10:18	02/19/13 15:12	1
Anthracene	130		12	5.9	ug/Kg	☆	02/15/13 10:18	02/19/13 15:12	1
Benzo[a]anthracene	440		11	5.5	ug/Kg	☆	02/15/13 10:18	02/19/13 15:12	1
Benzo[a]pyrene	500		15	7.3	ug/Kg	☆	02/15/13 10:18	02/19/13 15:12	1
Benzo[b]fluoranthene	930		17	8.6	ug/Kg	☆	02/15/13 10:18	02/19/13 15:12	1
Benzo[g,h,i]perylene	520		28	6.2	ug/Kg	☆	02/15/13 10:18	02/19/13 15:12	1
Benzo[k]fluoranthene	270		11	5.1	ug/Kg	☆	02/15/13 10:18	02/19/13 15:12	1
Chrysene	610		13	6.4	ug/Kg	☆	02/15/13 10:18	02/19/13 15:12	1
Dibenz(a,h)anthracene	180		28	5.8	ug/Kg	☆	02/15/13 10:18	02/19/13 15:12	1
Fluoranthene	490		28	5.7	ug/Kg	☆	02/15/13 10:18	02/19/13 15:12	1
Fluorene	26	J	28	5.8	ug/Kg	☆	02/15/13 10:18	02/19/13 15:12	1
Indeno[1,2,3-cd]pyrene	480		28	10	ug/Kg	☆	02/15/13 10:18	02/19/13 15:12	1
1-Methylnaphthalene	85		57	6.2	ug/Kg	☆	02/15/13 10:18	02/19/13 15:12	1
2-Methylnaphthalene	140	J	57	10	ug/Kg	☆	02/15/13 10:18	02/19/13 15:12	1
Naphthalene	220		57	6.2	ug/Kg	☆	02/15/13 10:18	02/19/13 15:12	1
Phenanthrene	400		11	5.5	ug/Kg	☆	02/15/13 10:18	02/19/13 15:12	1
Pyrene	380		28	5.2	ug/Kg	☆	02/15/13 10:18	02/19/13 15:12	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
o-Terphenyl	36		30 - 130				02/15/13 10:18	02/19/13 15:12	1

TestAmerica Savannah

Sample results have been qualified by URS in accordance with the Non-Industrial Use Property Sampling Event QAPP for the 35th Avenue Removal Site, Birmingham, Alabama, Revision 1 (OTIE, October 2012)